

REMARKS

Upon entry of the present Reply, claims 1-13 and 16-21 will be pending, of which claims 1-13 and 16-21 will have been amended to improve the language of the claims. Claims 14 and 15 will have been canceled without prejudice or disclaimer of the subject matter recited therein. In particular, the present amendments have been made in order to improve the grammar, idiom and syntax used in the claims so as to clarify the features of Applicants' invention.

Initially, Applicants note with appreciation the Examiner's reconsideration and withdrawal of the Restriction Requirement, mailed June 19, 2006, and examination on the merits of pending claims 1-21.

Applicants further note with appreciation the Examiner's indication of the allowability of claims 11 and 18 and 19, and for indicating that claim 20 would be allowable if Applicants amended the claim to overcome the rejection under 35 U.S.C. 101. Applicants further thank the Examiner for indicating that dependent claim 13 contains allowable subject matter.

Further, Applicants note with appreciation the Examiner's consideration of the documents cited in the Information Disclosure Statements (IDSs) filed on March 31, 2004, July 8, 2004, June 13, 2006, January 26, 2007, February 12, 2007 and February 27, 2007 in the present application. Applicants thank the Examiner for returning, with the afore-noted Official Action, initialed and signed copies of the Forms PTO-1449 that accompanied the January 26, 2007 and February 12, 2007 Information Disclosure Statements, and for returning, with the previous Official Action, mailed September 26,

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2006, the Forms PTO-1449 that accompanied the March 31, 2004, July 8, 2004 and June 13, 2006 IDSs. Applicants note, however, that the returned copy of the Form PTO-1449, which has been signed by the Examiner, that accompanied the Supplemental Information Disclosure Statement (SIDS), filed January 26, 2007, does not include the Examiner's initials next to the patents cited on the Form PTO-1449. Accordingly, Applicants request that the Examiner complete the Form PTO-1449 and send the completed form with the next Official communication. Since the U.S. Patent and Trademark Office has an electronic copy of the original Form PTO-1449 that accompanied the SIDS of January 26, 2007, Applicants do not believe it is necessary to resend the copy of Form PTO-1449 to the Examiner. However, should the Examiner need a copy of the Form PTO-1449, the Examiner is requested to contact the undersigned and a copy will be provided upon request.

Applicants bring to the attention of the Examiner a Supplemental Information Disclosure Statement (SIDS) that was filed on June 14, 2007, after the above-noted Official Action was mailed. Applicants respectfully request that the Examiner consider the documents cited in the SIDS and return a signed and initialed copy of the Form PTO-1449 that accompanied the June 14, 2007 SIDS, along with a signed and initialed copy of the Form PTO-1449 that accompanied the SIDS of January 26, 2007

Applicants also note with appreciation the Examiner's acknowledgement of Applicants' claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f), as well as confirmation of receipt of the certified copy of the priority document.

Additionally, Applicants also note with appreciation the Examiner's indication of the acceptance of the drawing filed on December 26, 2006.

The above-noted Official Action, mailed April 9, 2007, contains one objection and seven separate rejections. In particular, claim 11 is objected to for containing a period where a comma should have been used. Claim 20 is rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over SHARMA et al. (US 6,816,248 B). Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHARMA et al. in view of SHUHEI (JP 11-295214 A). Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over SHARMA et al. in view of VAN HEUVELEN (US 4,704,029 B). Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHARMA et al. in view of SALO (US 6,760,098 B). Claims 12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over SHARMA et al. in view of BYRNE et al. (US 6,172,746 B). Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over SHIGERU (JP 2000-019110). Applicants respectfully traverse all of the rejections and request reconsideration and withdrawal of the same for at least the following reasons.

Before addressing the merits of the objections and rejections of the claims, Applicants thank the Examiner for the detailed Official Action.

Regarding the objection to claim 11 for containing informalities, upon entry of the present Amendment, claim 11 will have been amended to delete the objected to informality. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection to claim 11 and an indication of the allowability of the claim.

Regarding the rejection of claim 20 under 35 U.S.C. 101, Applicants traverse this rejection. Applicants submit that the invention claimed in claim 20 is within the purview of patentable subject matter as defined under 35 U.S.C. 101.

Applicants note that the United States Patent and Trademark Office (USPTO) issued *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, which were published in the Official Gazette on November 22, 2005. The *Guidelines* explicitly state that “[t]he burden is on the USPTO to set forth a prima facie case of unpatentability.” In establishing a prima facie case of unpatentability, the *Guidelines* state that a determination must be made whether the claimed subject matter falls within an enumerated statutory category, *i.e.*, machine, manufacture, composition of matter, or process (also *see In re Alappat*, 33 F.3d 1526, 1542 (Fed. Cir. 1994) (en banc)).

Once a determination is made that the claimed subject matter falls within one of the four enumerated statutory categories, a determination must then be made whether the claimed subject matter falls within a Section 101 Judicial Exception – Laws of Nature, Natural Phenomena and Abstract Ideas or a Practical Application of a Section 101 Judicial Exception. Under this second determination, a practical application of the Section 101 judicial exception can be identified in at least two ways. First, if the claimed invention “transforms” an article or physical object to a different state or thing. Second, if the claimed invention otherwise produces a useful, concrete and tangible result.

Referring to claim 20, the claim is directed to a process. As such, claim 20 falls within the enumerated Section 101 statutory categories.

Next, claim 20 recites, *inter alia*, e.g., measuring a luminous energy distribution, displaying an error when the measured luminous energy is greater than a tolerance value and controlling a light source to radiate a light. As such, the claimed subject matter of claim 20 produces a useful, concrete and tangible result, e.g., a measured luminous energy distribution, a displayed error when the measured luminous energy is greater than a tolerance value and a controlled light source. Furthermore, there clearly exists a transformation of matter, e.g., a display that displays an error and/or a light source that is controlled to radiate a light.

Thus, Applicants submit that the subject matter of claim 20 is statutory under 35 U.S.C. 101. Accordingly, since a *prima facie* case of unpatentability under 35 U.S.C. 101 has not been established, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 22 under 35 U.S.C. 101.

Regarding the rejection of claim 1 under 35 U.S.C. 103(a) based on SHARMA et al., Applicants traverse the rejection. Applicants submit that SHARMA et al. does not disclose, teach and/or suggest, whether taken alone or in any proper combination, *inter alia*, a light source and/or a photoelectric sensor being attached to a prism, much less the light source being attached to an entrance face of the prism and the photoelectric sensor being attached to an exit face of the prism, in manner claimed in claim 1.

Contradistinctively, SHARMA et al. disclose a hand-held automatic refractometer that (referring to, e.g., Figure. 2) includes a prism 30, a light source 32 and a photoelectric sensor 22, each of which is configured in the manner shown in, e.g., Figures 2-4B. As shown, e.g., in Figure 3, SHARMA et al. illustrate that the light source 32 and

the photoelectric sensor 22 are not attached to any of the prism surfaces. Furthermore, Applicants submit that one of ordinary skill in the art would not have been motivated to attach the light source 32 to an entrance face of the prism 30, much less attaching the light source 32 to the entrance face of the prism 30 and attaching the photoelectric sensor 22 to an exit face of the prism 30.

In fact, Applicants submit that any attempt to alter the configuration of the components in the refractometer 10 in SHARMA et al. in the manner proposed in the Official Action would destroy the SHARMA et al. system. For example, the sensor 22 shown in Figure 22 has much greater dimensions than any exit face of the prism 30 and therefore the sensor 22 cannot be attached to any exit face of the prism 30, but must, instead, be used in conjunction with a mirror 42, as shown, e.g., in Figures 4A and 4B. In fact, Applicants submit that if the sensor 22 were to be attached to the prism 30 as posited in the Official Action, one of ordinary skill in the relevant art would realize that the refractometer 10 would not function properly, since a much smaller area of the sensor 22 would be in contact with a surface of the prism 30, with the remaining area of the sensor 22 remaining unattached to anything, and thereby being exposed to additional dark noise, such as, for example, from infrared radiation, that may render the entire system inoperative.

Thus, not only does SHARMA et al. not disclose, teach and/or suggest the invention of claim 1, but one of ordinary skill in the art would not have been motivated to modify SHARMA et al. in the manner suggested in the Official Action; nor, would one

of ordinary skill in the art have been motivated to try to modify the SHARMA et al. system in the manner suggested in the Official Action.

Accordingly, because SHARMA et al. does not disclose or suggest, whether taken alone or in any proper combination, each and every element of claim 1, withdrawal of the rejection under 35 U.S.C. 103(a) based on SHARMA et al. is respectfully requested.

At least for each and all of the reasons set forth above, independent claim 1 is allowable over SHARMA et al.. In this regard, if the rejection of claim 1 over SHARMA is maintained, the Examiner is again requested to provide citation to any proper secondary reference which discloses the features of claim 1, which the Examiner has acknowledged to be absent in SHARMA et al., as well as an explanation of a proper motivation to modify SHARMA et al. with the teachings of any such secondary reference, such that the combination of features recited in claim 1 would be rendered obvious.

Regarding the rejection of claims 2-3 under 35 U.S.C. 103(a) based on SHARMA et al. and SHUHEI, Applicants traverse the rejection. The rejection relied on SHUHEI only to teach adhering a light source to a face of a detecting structure (*see, e.g.*, page 5 of the Official Action). Therefore, Applicants submit that SHUHEI does not cure the noted-above deficiencies of SHARMA et al., and that the rejection of claims 2-3 should be reconsidered and withdrawn in the next Official communication.

Since claims 2-3 depend from claim 1 and are patentably distinguishable for at least the reasons provided above with respect to claim 1, as well as for additional reasons related to their own recitations, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 2-3 under 35 U.S.C. 103(a) based on SHARMA et al.

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al. and SHUHEI, and an indication of the allowability of claims 2-3 in the next Official communication.

Applicants respectfully traverse the rejection of claim 4 under 35 U.S.C. 103(a) based on SHARMA et al. and VAN HEUVELEN. The rejection relied on VAN HEUVELEN only to teach a slit being arranged between a light source and an entrance face of a prism (*see, e.g.*, page 6 of the Official Action). Therefore, Applicants submit that VAN HEUVELEN does not cure the noted-above deficiencies of SHARMA et al., and that the rejection of claim 4 should be reconsidered and withdrawn in the next Official communication.

Since claim 4 depends from claim 1 and is patentably distinguishable for at least the reasons provided above with respect to claim 1, as well as for additional reasons related to its own recitations, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 4 under 35 U.S.C. 103(a) based on SHARMA et al. and VAN HEUVELEN, and an indication of the allowability of claim 4 in the next Official communication.

Regarding the rejection of claims 5-10 under 35 U.S.C. 103(a) based on SHARMA et al. and SALO, Applicants respectfully traverse this ground of rejection. Applicants submit that any proper combination of SHARMA et al. and SALO would not disclose or suggest a sample stage including a non-adhesive coating. Moreover, Applicants submit that absent hindsight, one of ordinary skill in the art would not have been motivated to combine SHARMA et al. and SALO to arrive at the presently claimed invention.

It is conceded at page 6 of the Official Action that “SHARMA does not disclose coating the sample stage with a non-adhesive coating.” The rejection of claims 5-10 relies on SALO for a teaching of a sample stage having a polytetrafluorethylene or TEFLON coating. Contrary to the assertions made in the Official Action, Applicants submit that SALO does not teach a sample stage 5 having a TEFLON coating, but instead teaches a “sealing 5” for floatingly supporting an optical module 4. The sealing 5 is arranged between a housing structure and an optical window (*see, e.g.*, column 3, lines 24-51). Hence, assuming for the sake of argument that SHARMA et al. could be combined with SALO, if one were to attempt to combine SHARMA et al. with SALO as suggested in the Official Action, the resultant combination would have positioned the sealing 5 of SALO on, for example, the prism 30 of SHARMA et al. to support the prism 30. However, Applicants submit that the resultant combination would not have disclosed and/or suggested coating the sample stage of SHARMA et al. with a non-adhesive coating.

Accordingly, Applicants submit that the Official Action has not set forth a *prima facie* case of obviousness since the rejection of claims 5-10 under 35 U.S.C. 103 based on SHARMA et al. and SALO does not show that the references, if combined, would disclose all of the claim elements of, for example, claim 5. Thus, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 5 under 35 U.S.C. 103(a) based on SHARMA et al. and SALO.

Further, since claims 6-10 depend from claim 5 and are patentably distinguishable for at least the reasons provided above with respect to claim 5, as well as for additional

reasons related to their own recitations, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 6-10 under 35 U.S.C. 103(a) based on SHARMA et al. and SALO, and an indication of the allowability of claims 5-10 in the next Official communication.

Regarding the rejection of claims 12 and 14-17 under 35 U.S.C. 103(a) as being unpatentable over SHARMA et al. and BYRNE et al., Applicants traverse the rejection in view of the herein contained amendments. Upon entry of the present Amendment, claim 12 will have been amended to include particular features from original claims 14 and 15. Applicants submit that any proper combination of SHARMA et al. and BYRNE et al. fails to teach and/or suggest a filter, which is arranged between an interface surface of a prism and a photoelectric sensor, that comprises a wavelength filter and a polarizer, wherein the filter is formed as one integrated body, laminating the wavelength filter and the polarizer to each other, as recited, e.g., in claim 12.

The rejection of claims 12 and 14-17 concedes that SHARMA et al. does not disclose the filter recited in, e.g., claim 12 (*see, e.g.*, pages 7-8 of the Official Action) and, therefore, relies on BYRNE et al. only to teach a filter that selectively allows transmission of light having certain wavelengths. However, Applicants submit that neither SHARMA et al. or BYRNE et al., whether taken alone or in any proper combination, teach or suggest, *inter alia*, a filter, which is arranged between an interface surface of a prism and a photoelectric sensor, that comprises a wavelength filter and a polarizer, wherein the filter is formed as one integrated body, laminating the wavelength filter and the polarizer to each other, as now recited, e.g., in claim 12.

At page 8 of the Official Action, i.e., with regard to claim 15, the Examiner states that “it would have been obvious to modify Sharma by laminating the filter and the polarizer together to reduce system noise.” Applicants respectfully traverse this conclusion. Applicants submit that neither SHARMA et al. or BYRNE et al. even teaches a polarizer, much less laminating a wavelength filter and a polarizer, as required in claim 12. Should the Examiner insist on maintaining this rejection, Applicants respectfully request that the Examiner provide objective evidence to show the features of the invention that are recited in claim 12 that are not found in the cited documents, e.g., the polarizer that is laminated with a wavelength filter, and to show a reason why one of ordinary skill in the art would have been motivated to modify SHARMA et al. and BYRNE et al. to include features of the invention, e.g., claimed in claim 12.

Accordingly, because any proper combination of SHARMA et al. and BYRNE et al. are submit to not teach or suggest the claimed invention of claim 12, the rejection of claim 12 under 35 U.S.C. 103 based on SHARMA et al. and BYRNE et al. should be reconsidered and withdrawn, and claim 12 should be indicated to be allowable in the next Official communication.

Further, since claims 16 and 17 (claims 14 and 15 having been canceled upon entry of the present Amendment) depend from claim 12 and are patentably distinguishable for at least the reasons provided above with respect to claim 12, as well as for additional reasons related to their own recitations, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 16 and 17 under 35 U.S.C. 103(a) based on SHARMA et al. and BYRNE et al., and an indication of the allowability

of claims 12, 16 and 17 (claims 14 and 15 having been canceled upon entry of this Amendment) in the next Official communication.

Regarding the rejection of claim 21 under 35 U.S.C. 103(a) as being unpatentable over SHIGERU, Applicants traverse the rejection. Applicants submit that SHIGERU does not disclose or suggest at least a prism having an entrance face or an exit face, much less a slit extending in a direction perpendicular to a plane-of-incidence of an interface surface, with the slit being arranged between a light source and the entrance face of said prism, as required, e.g., by claim 21.

Referring to the figures in SHIGERU, the document teaches that prism 2 is a semi-spherical structure with only a single planar surface, on which a sample 4 may be placed. However, Applicants submit that the spherical surface of the prism 2 may not be reasonably considered as both an entrance face and an exit face. Additionally, Applicants submit that SHIGERU does not teach or suggest a slit extending in a direction perpendicular to a plane-of-incidence of the interface surface. Accordingly, because SHIGERU does not disclose or suggest each and every element of claim 21, nor would such have been obvious to one of ordinary skill in the art, withdrawal of the rejection of claim 21 under 35 U.S.C. 103 based on SHIGERU is respectfully requested.

In view of the foregoing remarks, Applicants respectfully request reconsideration and withdrawal all rejections together with an indication of the allowability of claims 1-13 and 17-21 in the present application. Such action is respectfully requested and is believed to be appropriate and proper.

SUMMARY AND CONCLUSION

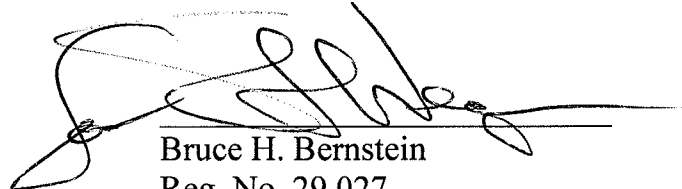
In view of the foregoing, it is submitted that the objection to claim 11 and the rejections under 35 U.S.C. 101 and 103 in the Official Action dated April 9, 2007, should be reconsidered and withdrawn. The present Amendment is in proper form, and none of the cited documents teach or suggest Applicants' claimed invention. In addition, the cited documents have been discussed and distinguished, while significant features of the present invention have been pointed out. Accordingly, Applicants request timely allowance of the present application.

Applicants note that this Amendment is being made to advance prosecution of the application to allowance, and no acquiescence as to the propriety of the Examiner's rejections is made by the present Amendment. All amendments to the claims which have been made in this Amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should an extension of time be necessary to maintain the pendency of this application, the Commissioner is hereby authorized to charge any additional fee to Deposit Account No. 19-0089.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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